OBSSR Lecture Series: New Technologies and Behavior Change Interventions: What Can They Do for Each Other?

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OBSSR Lecture Series Presenter: Dr. Bonnie Spring

Interviewer: I'm here with Dr. Bonnie Spring, today we're talking about mHealth technologies and their effects on behavior change interventions. First of all, I'd like to ask you, what were your main goals in coming to the NIH today for this talk?

Dr. Bonnie Spring: My main goals are really to encourage the behavioral science community and the computer science and engineering community to develop better cross dialogue. Because I think we very much bring different things to the table, extremely important and valuable things, we sometimes don't understand each other's needs very well.

So what I was trying to say is that for the behavioral science community, there are many things that technology brings to the table. One of them is an ability to reach populations in need better. Another is some of the kind of optimization methodology that has come out of computer science and engineering. I think what behavioral science brings to the technology community is the ability to think about why technologies work. And I think that's really important because the mobile health tech folks can really help us to really capture a whole other channel of interventions. These type one automatic processes that I think are just vastly underutilized.

Interviewer: And what are the main challenges that you would see in the spreading of the mobile health technology throughout the different demographics, different type so of communities that you'd ideally like to have these technologies really impact?

Dr. Bonnie Spring: I actually don't think there are any difficulties that are inherently more in one community than another, and I think that's been something; my experience in this has been very unusual. We've been able to use these technologies with highly educated affluent populations as well as with low tech-literate folks who have never used these kinds of technologies before. It's basic: you have to make sure people can understand them, and you have to be nice to them when they ask questions and encourage their questions.

I think the major barriers are actually the interdisciplinary team science ones. It's the lack of investigation in industry about whether new apps work, which means that there's a real risk of hype and profound disappointment when they don't. And on the other side there's a real risk that the behavioral science community will continue to be doing things in this very effortful burdensome way that they've always done them, and they won't be able to catch the wave that will let things become more scaleable and accessible to people.

Interviewer: And finally, moving forward in your research, what are your goals, where would you like to be moving forward?

Dr. Bonnie Spring: I would really like to be in a place where I'm able to use mobile health technologies with both the technical capabilities that I think the engineer and computer scientists can bring - the expertise in sensing and machine learning and in data mining - I would like to be able to harness all of that, and I would like to be able to educate the computer science folks well enough so that they will help us harness these type one, effortless, automatic ways of triggering change that I think are really our frontier.

Interviewer: Great. Thank you so much for your time Dr. Spring.

Dr. Bonnie Spring: Thank you, it was a pleasure.